

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/050025

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07K14/52 C12N15/19 C07K1/20

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS, Sequence Search

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category ° | Citation of document, with indication, where appropriate, of the relevant passages                                                                                                                                                                                                  | Relevant to claim No. |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| X          | MUSACCHIO A ET AL: "Recombinant Opc meningococcal protein, folded in vitro, elicits bactericidal antibodies after immunization"<br>1 April 1997 (1997-04-01), VACCINE, BUTTERWORTH SCIENTIFIC. GUILDFORD, GB, PAGE(S) 751-758 , XP004064539<br>ISSN: 0264-410X<br>page 752<br>----- | 1-3                   |
| A          | WO 98/14467 A (HUMAN GENOME SCIENCES INC)<br>9 April 1998 (1998-04-09)<br>page 23 - page 27; example 1<br>-----                                                                                                                                                                     |                       |
| A          | WO 02/28419 A (KOSCO VILBOIS MARIE ; WELLS TIMOTHY N C (FR); PROUDFOOT AMANDA (FR);<br>A) 11 April 2002 (2002-04-11)<br>claims 7,14; example 1B<br>-----                                                                                                                            |                       |

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

## ° Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
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- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

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- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the international search

23 August 2004

Date of mailing of the international search report

02/09/2004

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages                                                                                                                                                                                                                                                                                                                | Relevant to claim No. |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| A          | <p>PROUDFOOT A E I ET AL: "EXTENSION OF RECOMBINANT HUMAN RANTES BY THE RETENTION OF THE INITIATING METHIONINE PRODUCES A POTENT ANTAGONIST"</p> <p>JOURNAL OF BIOLOGICAL CHEMISTRY, AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS, BALTIMORE, MD, US,</p> <p>vol. 271, no. 5,<br/>2 February 1996 (1996-02-02), pages<br/>2599-2603, XP002056060</p> <p>ISSN: 0021-9258<br/>page 2599</p> <p>-----</p> |                       |
| E          | <p>EP 1 439 191 A (ARES TRADING SA)</p> <p>21 July 2004 (2004-07-21)</p> <p>page 2; claims 1-5; figure 1; sequence 1</p> <p>-----</p>                                                                                                                                                                                                                                                             | 1-5                   |

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/050025

| Patent document cited in search report |       | Publication date | Patent family member(s) |               | Publication date |
|----------------------------------------|-------|------------------|-------------------------|---------------|------------------|
| WO 9814467                             | A     | 09-04-1998       | US                      | 6001606 A     | 14-12-1999       |
|                                        |       |                  | US                      | 5912327 A     | 15-06-1999       |
|                                        |       |                  | CA                      | 2267641 A1    | 09-04-1998       |
|                                        |       |                  | EP                      | 0975657 A1    | 02-02-2000       |
|                                        |       |                  | JP                      | 2001503614 T  | 21-03-2001       |
|                                        |       |                  | WO                      | 9814467 A1    | 09-04-1998       |
|                                        |       |                  | US                      | 2003114379 A1 | 19-06-2003       |
|                                        |       |                  | US                      | 2002061551 A1 | 23-05-2002       |
|                                        |       |                  | US                      | 6451562 B1    | 17-09-2002       |
|                                        |       |                  | US                      | 2002076746 A1 | 20-06-2002       |
|                                        |       |                  | US                      | 2004152169 A1 | 05-08-2004       |
|                                        |       |                  | US                      | 6495129 B1    | 17-12-2002       |
|                                        |       |                  | US                      | 6632425 B1    | 14-10-2003       |
|                                        |       |                  | US                      | 2004024186 A1 | 05-02-2004       |
| -----                                  | ----- | -----            | -----                   | -----         | -----            |
| WO 0228419                             | A     | 11-04-2002       | AT                      | 265222 T      | 15-05-2004       |
|                                        |       |                  | AU                      | 1591902 A     | 15-04-2002       |
|                                        |       |                  | BG                      | 107685 A      | 28-11-2003       |
|                                        |       |                  | BR                      | 0114407 A     | 29-07-2003       |
|                                        |       |                  | CA                      | 2423616 A1    | 11-04-2002       |
|                                        |       |                  | CN                      | 1477969 T     | 25-02-2004       |
|                                        |       |                  | CZ                      | 20030947 A3   | 12-11-2003       |
|                                        |       |                  | DE                      | 60103078 D1   | 03-06-2004       |
|                                        |       |                  | DK                      | 1326628 T3    | 09-08-2004       |
|                                        |       |                  | EE                      | 200300139 A   | 16-06-2003       |
|                                        |       |                  | WO                      | 0228419 A2    | 11-04-2002       |
|                                        |       |                  | EP                      | 1326628 A2    | 16-07-2003       |
|                                        |       |                  | HU                      | 0302194 A2    | 28-10-2003       |
|                                        |       |                  | JP                      | 2004510426 T  | 08-04-2004       |
|                                        |       |                  | NO                      | 20031525 A    | 03-04-2003       |
|                                        |       |                  | SK                      | 4062003 A3    | 05-08-2003       |
|                                        |       |                  | US                      | 2004101509 A1 | 27-05-2004       |
| -----                                  | ----- | -----            | -----                   | -----         | -----            |
| EP 1439191                             | A     | 21-07-2004       | EP                      | 1439191 A1    | 21-07-2004       |

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